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ABSTRACT

The relationship between gender and reading achievement and gender and early literacy experiences was examined. It was hypothesized that gender differences do not exist in relation to reading achievement, but early literacy experiences do differ in relation to gender. Subjects were students in grades 6, 7, and 8. Results indicate that there are no significant differences in reading achievement in relation to gender at the middle school level. There are implications for family influences on literacy, where mothers are most involved in exposing children to literacy activities at an early age. (Contains 31 references and 2 tables of data. Appendixes contain a table of data and the questionnaire.) (Author/RS)

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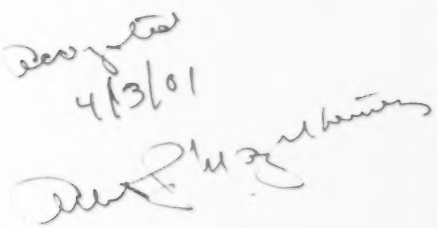
Gender Differences in Reading Achievement And Early Literacy Experiences

by

Lisa M. MacFarlane



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Abstract

The relationship between gender and reading achievement and gender and early literacy experiences was examined. It was hypothesized that gender differences do not exist in relation to reading achievement, but early literacy experiences do differ in relation to gender. Subjects were students in grades 6, 7, and 8. Results indicate that there are no significant differences in reading achievement in relation to gender at the middle school level. There are implications for family influences on literacy, where mothers are most involved in exposing children to literacy activities at an early age.

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The 21st century is upon us and our nation continues to struggle with a variety of gender issues. Among these issues related to gender is the ongoing problem of academic achievement, particularly in the area of reading and literacy. Gender differences in reading achievement is a popular, yet unresolved topic in research. Some studies indicate that girls significantly outperform boys in reading achievement, while other studies indicate a low correlation between reading achievement and gender. Further inconsistencies exist in reading achievement among boys and girls across grade levels.

The National Assessment of Educational Progress (NAEP), which collects information and interprets the assessment results, continuously monitors academic trends in achievement over extended periods of time. Reports show that at grades three, eight, and twelve, females had higher average reading scores than males (U.S. Department of Education, 1976, 1982).

A study completed by Gates (1961) indicates that gender differences in reading exist at the elementary level. Gates' (1961) study analyzed the reading achievement of 13,114 students in Grades 2 through 8 and found that girls significantly outperformed boys, and "that on the average girls' reading abilities excel boys' " (p. 434).

A cross cultural study done by Lummis and Stevenson (1990) on kindergarten, first, and fifth graders found that girls achieved significantly higher scores than boys for reading in kindergarten and first grade.

However, no significant differences were found at the fifth grade level. In addition, an article written by Cummings (1994) reports on the achievement of boys and girls in Maine. State reports indicate that at Grade 11 girls significantly outperformed boys in 1991-92 and in 1992-93 (Cummings, 1994).

An early study done by Stroud and Lindquist (1942) indicates significant gender differences in reading among students in Grades 3 through 8. However, these results show that there are no significant gender differences in reading achievement at the high school level.

A large descriptive study completed by Holgroebe, Nist, and Newman (1985) on over 50,000 high school sophomores and seniors indicates that gender differences at the high school level were very small. Similarly, in 1975 Thorndike (as cited in Holgroebe, Nist, & Newman, 1985) found low correlation between gender and reading scores in high school students, after analyzing data taken by the International Association for the Evaluation of Educational Achievement (IEA).

Research on the differences in reading achievement in relation to gender, or the lack of differences, remain inconsistent. But, if and when gender differences in reading achievement do exist, the cause of these differences then becomes an area of concern. Little is known about the possible bases of gender differences in reading (Lummis & Stevenson, 1990).

However, we do know that in our society roles and expectations are varied between gender. Boys and girls are socialized in different ways (Bank,

Biddle, & Good, 1980), and their early literacy experiences may differ in relation to their gender. Millard (1997) analyzed data collected in an earlier study on 10-12 year old students in Britain, and concluded that early literacy experiences in the home differ between boys and girls. The evidence suggests that girls are given more opportunities to have literacy experiences, than are boys. In addition, female adults are more likely to promote and take part in literacy experiences with children.

With this information and the results of Durkin's study (1965), that students who come to school already knowing a great deal about reading, come from homes that are literacy rich, we can conclude that early literacy experiences are of utmost importance for both boys and girls. Parents need to be "powerful models of literacy for their children" (Millard, 1997, p. 33). What these models might be like and whether literacy experiences differ for boys and girls prior to school are of importance to understanding early literacy contacts and their effects.

Hypothesis

To add information on this topic, the following study was undertaken. It was hypothesized that gender differences do not exist in relation to reading achievement among middle school students, but early literacy experiences do differ in relation to gender.

Procedures

A total of 118 students, 63 boys and 55 girls, from a public middle school in a large suburban community were selected to participate in this study. Residents of this community vary in terms of socioeconomic status and ethnic background. Over 60 languages are spoken within the school district and approximately 30 languages are spoken within the school. Two classes at each of the three grade levels were randomly selected for a total of six classes. All classes were heterogeneously grouped in terms of ability.

In the first part of the study, reading achievement of all subjects was measured using total reading scores from the Terra Nova, a nationally standardized test. Scores were obtained from the March 2000 administration of the test. They were then recorded and compared to investigate whether reading achievement differs in relation to gender. Test scores were obtained for 53 boys and 50 girls. (See Appendix A)

In the second part of the study, one female administrator distributed a questionnaire to all subjects in the six classes. The questions pertained to early experiences with reading in the home. The administrator read the questions aloud to each of the six classes as subjects responded in writing. Responses were then recorded and compared to investigate whether differences exist with early literacy experiences in relation to gender. 61 boys and 49 girls completed surveys. (See Appendix B)

Results

To determine whether gender differences exist in terms of reading achievement, national percentile scores from the Terra Nova were statistically analyzed. As can be seen in Table I, there were no significant differences in terms of the mean achievement of the samples in relation to gender, though the girls' scores were more varied.

Table I

Means, Standard Deviations and t of the Samples' Scores

Sample	M	SD	t
Boys	68.72	16.70	.06
Girls	68.96	23.81	

To determine whether gender differences exist in terms of early literacy experiences, percentages were computed from responses on the student questionnaire. As can be seen in Table II, some differences exist in terms of early literacy experiences in relation to gender.

Table II

Students Responses to Early Literacy Experiences

Question	Boys	Girls
Were books available to you in your home?	92% Yes	96% Yes
Before entering school, who read to you most?	57% Mom 10% Dad	59% Mom 10% Grandmother
Before entering school, did you go to the library?	34% Yes	59% Yes
Who took you to the library?	52% Mom 20% Dad 20% Parents	52% Mom 31% Parents
Who was most helpful in teaching you to read?	41% Mom 21% Teachers 10% Dad	35% Mom 22% Teachers 14% Parents
Do you have memories of learning to read at home?	70% Yes	80% Yes
Before entering school, did you ever get books as gifts?	62% Yes	73% Yes
Who would you consider to be the main reader in your home?	34% Mom 14% Dad 14% Sister 14% Self	39% Self 31% Mom

Do you ever discuss what you are reading with your family?	48% Yes	63% Yes
Who in your home would you most likely share books with?	21% Mom 20% Sister	43% Mom 29% Sister
Who in your home would most likely share books with you?	26% Sister 21% Mom	37% Mom 24% Sister

Modest differences exist in who went to the library before entering school and in discussing books with family members. A larger percentage of girls went to the library before entering school, and a larger percentage of girls discuss books with family members. Small differences exist in terms of memories of learning to read at home and receiving books as gifts. Again, a larger percentage of girls have memories of learning to read at home, and a larger percentage of girls receive books as gifts. The largest difference exists in who is considered to be the main reader in the home. Boys ranked their mothers as being the main reader 34 percent of the time, whereas girls ranked themselves to be the main reader in the home 39 percent of the time. Boys only ranked themselves as the main reader 14 percent of the time. Another difference exists in who would most likely share books. Boys reported sisters more often in terms of sharing books with them, and girls reported mothers more often.

Mothers were reported over 50 percent of the time for both boys and girls as the person who read to them most as a small child. However, fathers were reported more often after mothers for the boys, and grandmothers were reported more often after mothers for the girls. Mothers were also reported as the person being most helpful in teaching reading for both the boys and the girls. Teachers fell second after mothers in terms of teaching reading for both groups.

Conclusions and Implications

Although the results show that girls are more involved than boys with literacy activities, the differences are modest. More importantly though, this study shows obvious patterns in terms of which family member is most responsible in a child's early experiences with literacy. Clearly, mothers are involved most in terms of exposure to literacy type activities during a child's early years. Fathers, on the other hand, appear to play a minimal role in children's early literacy experiences. When fathers are indicated as being involved in literacy activities, it is very often as part of the parental team.

Further studies must be undertaken to understand the possible causes of these implications, and the possible effects that may result. Specifically, the effect this could have on boys in terms of their views about literacy.

Gender Differences and Early Literacy Experiences:

Related Research

The issue of gender differences in reading achievement has been a popular topic in research for many decades and continues to be explored. Various studies have investigated gender differences in reading achievement across grade levels, and results have been contradictory. Much research has shown that gender differences do exist, while other findings dispute this. In addition to this discrepancy, there does not appear to be consistency in the research. The way in which reading achievement is measured differs throughout studies. Furthermore, the literature related to gender differences in academic performance often contains inconsistent findings, contradictory theories, and claims that are unsupported by the research (Halpern, 1986).

An early study completed by Stroud and Lindquist (1942) describes gender differences in reading achievement; however, Hogrebe, Nist, and Newman (1985) dispute the findings. Stroud and Lindquist (1942) collected data from the Iowa Every-Pupil Test for high school students and the Iowa Every-Pupil Test for students in grades 3 to 8 for the years 1932-1939. For each of the two tests, the subjects were arranged alphabetically by names within schools, and every tenth person was chosen. It is reported that there is a significant difference in reading achievement in favor of the girls for grades 3 to 8. Results also show that there is no significant gender difference in reading achievement at the high school level. Hogrebe, Nist, and Newman (1985) dispute the findings from the Iowa Every-Pupil Test, saying that Stroud and Lindquist "failed to find significant differences even at the elementary level" (p. 717).

A larger study completed by Gates (1961) also reported that gender differences exist in favor of girls. Gates (1961) gathered sample scores of 13,114 students – 6,646 boys and 6,468 girls in grades 2 through 8. Students from twelve schools in ten states took all three parts of the Gates Reading Inventory, including Speed of Reading, Reading Vocabulary, and Level of Comprehension. On all three tests, the mean raw score for girls was higher than the mean raw score for boys, and in all grades (except grade 2), the difference was significant. Though boys got the highest scores more often than girls, the superiority was not consistent, and the greater proportion of boys got lower scores. Gates (1961) concluded, "girls' reading abilities excel boys' " (p. 431). Again, Hogrebe, Nist, and Newman (1985) dispute the conclusions, stating "statistical significance obtained was due to his large sample size ...there were many instances where results were barely significant" (p. 717).

Hogrebe, Nist, and Newman (1985) and Applebee et al. (1988) also argue reports from the National Assessment of Educational Progress (NAEP). NAEP is a national survey that continuously monitors academic trends in achievement over extended periods of time. Reports show that at grades 3, 7, and 11, females had higher average reading scores than males (U.S. Department of Education, 1976, 1982). However, NAEP's "Reading Report Card" (Applebee et al., 1988) also found that the average reading proficiency of females in grades 3, 7, and 11 was only "somewhat better" than males in 1971, 1975, 1980, 1984, and 1986. In addition, Hogrebe, Nist, and Newman

(1985) report that the actual figures show only a slight difference in favor of females. At the grade 11 level, the mean percentage of correct responses was 77.7% for males and 80.46% for females. Females on average answered 3.4 more items correct than males. It must be noted, though, that these differences are considered significant at the .05 level.

Consequently, Hogrebe, Newman, and Nist (1985) completed their own study. This study gathered data from the National Center for Education Statistics and was known as High School and Beyond (HSB). 1,122 high schools from around the country were selected and a random sampling of sophomores and seniors was taken. The sample consisted of 24,678 in-school sophomores and 23,362 in-school seniors. The students were given vocabulary and short passage comprehension subtests. Results show that gender accounted for less than 1% of the variance in each of the reading achievement test scores. Hogrebe, Newman, and Nist (1985) conclude that differences in achievement in relation to gender at the high school level are very small.

Another research study that found no difference in reading achievement in relation to gender was reported by Clark (1959). The study reported consisted of boys and girls in grades three, five, and eight. They were drawn at random from a nationwide sample of all boys and girls enrolled in public schools in the United Sates. The sample included 75 boys and 75 girls at each of the three grade levels, and 75 different school systems and cities were represented. The test used for measuring reading

achievement was the California Achievement Test (CAT). The CAT measures achievement in the basic skills of reading, arithmetic, and language. The scores for reading include vocabulary and reading comprehension. Results show that there is no significant difference between the performance of boys and girls at any of the three grade levels for reading vocabulary and reading comprehension.

Another study reporting similar findings was completed by Flynn and Rahbar (1994). This study analyzed standardized test scores of 708 students in 13 districts in the Midwest at grades 1 and 3. Total reading cores from the Iowa Tests of Basic Skills, the California Achievement Test, or the Stanford Achievement Test were used. The results indicated a lack of significance between boys and girls in reading achievement.

As a result of short-term studies that may not have been comparable across age levels, and the limitations of cross sectional designs, Becker and Forsyth (1990) designed a longitudinal study to describe gender difference in achievement. "A longitudinal design that enables comparisons to be made for a fixed group of subjects would be more desirable for the tracking and study of gender differences in academic achievement" (p. 1-2). A sample of 3,002 students from grades 3 through 12 – 1,642 girls and 1,360 boys - was used. Data was gathered from the Iowa Tests of Basic Skills for grades 3 through 8 and the Iowa Tests of Educational Development for grades 9 through 12 for each year from 1978-79 through 1987-88. Only students who were tested in each of the ten years were included in the study. Selected percentiles (90^{th},

75th, 50th, 25th, and 10th) were estimated for both boys and girls score distributions to study the interactions of achievement level and gender over time. The differences between means in the area of vocabulary show a constant but small advantage for boys starting at grade 5 and, except for grade 10, extending through grade 12. Additionally, boys consistently scored higher than girls at the upper percentiles across all grades. In contrast, at the 10th percentile there is a small advantage in favor of the girls in all but three grades. In reading, the differences between means for girls and boys indicate an advantage in favor of girls, with the biggest difference at grades 3. Girls were above boys at all percentile levels except the 10th at grade 3. Girls performed higher than boys at the lower percentiles across grades 4 through 8, and this pattern continues for grades 9 through 12 where the female advantage is observed at all percentile levels. The largest differences were at the 25th and the 10th percentiles.

Similar to Becker and Forsyth (1990), Han and Hoover (1994) completed a longitudinal study on 15,000 students from the years 1963 through 1992. The achievement tests used were the Iowa Tests of Basic Skills for kindergarten through grade 8, the Iowa Tests of Educational Development for grades 9 through 12, and the Tests of Achievement and Proficiency. Differences in performance at the 10th, 50th, and 90th percentile were examined to study the interaction between achievement level and gender. Results are reported in terms of grade equivalent scores for the 1963, 1970, 1977, 1984, and 1992 Iowa Tests of Basic Skills for kindergarten

through grade 8. They show that differences between boys and girls have remained similar over the 30 years, with girls consistently scoring higher than boys in reading comprehension. These differences are largest at the 50th and 10th percentile. The differences are not as large in vocabulary, but in most cases girls have higher scores at the 50th and 10th percentile. At the 90th percentile boys score equal to or slightly above females in vocabulary.

Two cross cultural studies that also report gender differences in reading achievement were completed by Johnson (1973-1974) and Lummis and Stevenson (1990). Johnson (1973-1974) designed a study to investigate gender differences in reading ability among elementary students in four English speaking nations – Canada, England, Nigeria, and the United States. Within one community in each country, 50 boys and 50 girls were randomly selected from grades 2, 4, and 6. The Gates-MacGinitie Tests were used to measure vocabulary and comprehension, and four subtests from the Wisconsin Design Word Attack Battery were used to measure phonics. Subjects were tested in groups by grade level in each school. Results show that in England and Nigeria boys outscored girls on about two-thirds of the tests, whereas in Canada and the United States girls outscored boys on three-fourths of the tests. Looking at the results from the U.S., the mean of the six scores were higher for girls at each of the three grade levels than boys. However, at grade 6, boys scored slightly higher in vocabulary. Although the girls did score higher on most of the tests, only four differences were significant, and 3 out of the 4 were on the phonics tests.

Lummis and Stevenson's (1990) cross cultural study included students from the United States, Taiwan, and Japan. One purpose of this multidimensional study was to find out if gender differences exist in reading achievement as early as kindergarten and whether they are found throughout the elementary years. This study developed teams of bilingual and trilingual researchers to construct achievement tests that were reliable, appropriate, and culturally unbiased. Reading achievement was measured by vocabulary and comprehension. Students were chosen from the large cities of Minneapolis-St. Paul, Taipei, and Sendai. Study 1 consisted of 24 kindergarten students from each city. Study 2 consisted of two first and two fifth grade classrooms that were randomly selected from ten schools in each of the three cities from Study 1. Achievement tests were administered individually for students in both Study 1 and Study 2. Results showed that girls achieved significantly higher scores than boys in reading in kindergarten and at first grade. However, reading achievement scores did not differ significantly in relation to gender at the fifth grade level.

An earlier study done by Samuels (1943) also reports gender differences in reading in favor of girls in early elementary grades. This study was completed in Phoenix on 453 first grade students – 216 boys and 237 girls. The students were given the Gates Primary Reading Test, Form 1 and three reading grade norms were averaged. Results show that girls significantly outperformed boys. A second part of this study paired up the boys and girls on the basis of mental age, and compared the test scores. One

hundred pairs were made: 40 pairs had the same mental age, 37 pairs differed in mental age by one month, 18 pairs differed in mental age by two months, and 5 pairs differed in mental age by three months. Results show that girls were more superior in more pairs than boys on the reading test, though no attempt was made to show if these differences were significant.

More recently, Marsh, Smith, and Barnes (1985) found differences in reading achievement in relation to gender in their study of 559 fifth-grade students in Australia. This was a multidimensional study of self-concepts that had four purposes, one which was to examine gender differences in self-concept and relate these to gender differences in academic achievement. For this part of the study, the comprehension and word knowledge tests of the Primary Reading Survey Tests were given. Teacher ratings of reading (Read Ratings) were also taken as an indicator of achievement. Results show that girls had higher scores than boys, though reports of significance were not noted.

Considerable research has been done on gender differences in reading achievement, and it is clear that this issue remains unresolved and unanswered, despite findings that boys more often than girls are considered to have reading problems. Boys are more frequently referred for remedial reading, are more frequently diagnosed as having reading disabilities (Blom, 1971), and more boys attend reading clinics than do girls (Durrell, 1956; Newton, 1959). Although the results from decades of research on gender and reading achievement remain inconsistent and contradictory, one major

problem in the research exists. Achievement measures have varied from study to study, and "one cannot assume that gender differences on one type of test are necessarily indicative of gender differences on another" (Hogrebe, Nist, & Newman, 1985, p. 717). In addition, a wide variety of standardized and achievement tests have been used, and the measurement of reading achievement has varied across the studies.

Although it remains unclear if gender differences in reading achievement exist, it is apparent that gender differences exist in relation to attitudes and interests toward reading. It is well documented that reading is considered a feminine activity (Mazurkiewicz, 1960; Kagan, 1964; Stein & Smithells, 1969; Johnson, 1973-1974; Pidgeon, 1994; Barrs & Pidgeon, 1998), and that girls are more interested in reading just for fun (Lehman and Witty, 1928; Millard, 1994; Millard, 1997).

An early study done by Lehman and Witty (1928) reports on sex differences in reference to "reading books, just for fun." Over 5000 people from several Kansas towns took part in the study. Ages ranged from eight to 22 and over. Older students were from the University of Kansas. Participants were asked to check from a list of 200 activities only those in which they had voluntarily engaged in during the preceding week. One of the items on the list was "Reading books". Participants were also asked to designate the three activities which they liked best, and the one activity which consumed the largest amount of their time. Results indicate that sex differences in reference to the popularity of book reading, and the relative

amount of time devoted to book reading were significant in favor of girls. "Reading books" was selected as one of the three favorite activities by only two out of the sixteen groups of boys; one of these groups being the members of the faculty of the University of Kansas and the other being the 21 ½ year old group. Ten out of sixteen groups of girls ranked book reading as number one in popularity. "Reading books" consumed more time than any other activity for three groups of boys, ages 9 ½, 20 ½, and 22 ½. This activity consumed more time than any other activity for girls in ten groups, ages from 9 ½ through 18 ½. Between the ages of 10 ½ and 16 ½, book reading is mentioned as one of the three favorite activities by girls twice as much as than by boys. Also, at most age levels a larger percent of girls judged book reading to have consumed more of their leisure time than any other activity.

After a preliminary investigation and the partial establishment of the validity of the hypothesis that males generally view reading as a feminine activity, Mazurkiewicz (1960) investigated the relationship between a son's attitude toward reading, in terms of its being a mostly masculine or mostly feminine activity, and his reading abilities. Mazurkiewicz (1960) also sought to determine the degree a boy's attitude toward reading is related to his father's attitude. One hundred fifty seven male eleventh-graders from an urban community, having a minimum age of 16, and each of their fathers, took part in the study. Results show, as previously found, males generally view reading as a mostly feminine activity. Results also show that this attitude exerts some influence on a boy's reading ability. The boy's attitude

in turn is related to his father's attitude. Mazurkiewicz (1960) concluded that achievement in reading "is to some extent a reflection of some social-cultural influences" (p. 263).

Similarly, Dwyer (1974) examined the relationship between sex role standards (the extent to which the individual considers certain activities appropriate to males or to females) and achievement in the area of reading. Participants were 385 white children from a suburban public school in northern California. It was found that stronger social sanctions exist against males participating in the female sex role, than females participating in the male role. Additionally, results from a questionnaire showed that there was agreement between the sexes as to what constituted girls' things than there was to what constituted boys' things.

According to Maccoby (1966) "all societies prescribe different attitudes and activities to men and women" (p. 215). Reading is one sex role that based on the research, our society views as mostly a feminine activity. In addition, expectations also vary between gender. Boys and girls are socialized differently (Bank, Biddle, & Good, 1980), and are expected to behave differently from one another, thus perpetuating sex roles. So strong is this influence that differences have been detected in the play behavior of 1-year-old boys and girls (Goldberg & Lewis, 1969).

Millard (1997) suggests that there are significant differences in early reading experiences in relation to gender. Millard (1997) completed a study on 255 pupils – 121 girls and 134 boys – from nine schools in South

Yorkshire. The attitudes and experiences of reading were recorded through questionnaires at the start of the participants' secondary schooling. In addition, sixteen participants were interviewed. Results pointed to significant differences with reading experiences in relation to gender. The evidence supports that children construct reading as a girl appropriate activity. Girls more often give books as presents and girls are portrayed as readers more in the illustrations in children's books.

According to Barrs and Pidgeon (1998), much of reading is about pretending, and girls get involved in pretending or role-playing more often than boys (Barrs, 2000). "Nonconformity rarely causes problems for a girl, since she is allowed a range of acceptable behavior. She can play in any fashion without embarrassment. A boy in a frilly bed jacket is expected to be laughed at, but a super hero cape on a girl creates no stir" (Millard, 1997, p. 39). According to Johnson (1985) many fathers would rather see their young sons toss a football or play hockey than stay inside and read a book. Millard (1997) found that active toys that encourage boisterous play are most often given to boys while girls are encouraged to sit and look at books.

Another part of the Millard (1997) study found that reading is firmly identified by both sexes as more appropriate to the female members of families. Mothers were consistently recorded as the key influence in the early stages of learning, but where fathers were featured in the accounts it was usually as part of the parental team, rarely alone. Mothers are seen by both sexes to play a key role in their children's early acquisition of literacy,

by organizing events which involve their children's access to books before and beyond the reach of school.

Participants listed family members who read most often. Boys cited their mothers more frequently and girls placed mothers only second to themselves. Sisters were mentioned more than fathers or brothers, and grandmothers not grandfathers were mentioned. When a father was reported as the main reader in a family, the general pattern given was one of reading for a set purpose, rather than leisure or pleasure. Participants also listed the person in their family who would recommend new books to them or whom they would most likely share books with. Boys and girls named mothers most of the time, although sisters and grandmothers were also mentioned as key influences. Over 70% of boys said they never share books, and over half of the girls share them with their friends or female members of their family.

Millard (1997) had participants rate themselves on the amount of time they spent reading. "Occasional readers" were those who read only when necessary for a practical purpose; "light readers" were those who read the back of a newspaper or a magazine article regularly; "committed readers" were those who read frequently but for short periods at a time – no longer than 30 minutes per day; and "heavy readers" were those who read whenever they get an opportunity at anytime in the day. Results indicate that girls made up the largest portion of heavy readers. Twenty-two percent of girls said they did very little reading, while 46 percent of boys did very little

reading. Many more of the boys identified school as the place where they did the majority of their reading.

Not only do roles and expectations differ for boys and girls, but according to Millard (1997), so do their early literacy experiences. The results of this study imply that the emphasis on reading lies heavily on parental influences, usually maternal. Early literacy experiences are important for both boys and girls, and families play a crucial role in the success of emergent literacy (Tizard & Hughes, 1984). "Parents act as powerful models of literacy for their children, not only providing them with their first books and materials for writing, but also, in many cases, acting as their first teachers" (Millard, 1997, p. 33).

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Appendices

Appendix A

National Percentile Scores

Grade 6 Boys	Grade 6 Girls	Grade 7 Boys	Grade 7 Girls	Grade 8 Boys	Grade 8 Girls
67	99	78	99	70	21
47	30	46	46	82	74
69	48	91	90	58	53
75	93	79	67	82	49
91	99	53	68	54	93
64	94	59	74	68	32
50	98	65	99	66	82
69	99	80	44	44	27
67	84	53	86	66	82
82	71	89	80	80	52
84	97	60	88	52	86
69	95	91	81	48	40
88		61	56	56	59
96		80	86	8	49
99		62	78	79	54
66		65	48	70	37
99			38	53	52
			85	82	
			76	69	
			86	61	
			24		

Appendix B

Reading Questionnaire
(Confidential)

Sex: Male/Female

Grade: 6/7/8

Age: _____

* Please answer the following questions as best as you can. *
** If you are unsure of an answer, please leave it blank. **

Circle all types of literature that was available to you in your home when you were a small child.

newspapers magazines books

What was your favorite book as a small child?

Who introduced that book to you?

Before you entered school, who read to you most?

Before you entered school, did you go to the library?

If so, who took you?

Who was most helpful in teaching you to read?

What memories do you have of learning to read at home?

Before you entered school, did you ever get books as gifts?

If so, how often?

Who would you consider to be the main reader in your home?

If you answered yourself, whom would you consider next?

What do they read?

Do you ever discuss what you are reading with your family?

Who in your home would you most likely share books with?

Who in your home would most likely share books with you?

Do you like to read?

On average, how often do you read for enjoyment?